

Atlantic Richfield Company

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January 6, 2014

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Jere Johnson
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

Subject: December 2013 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this December 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

December 2013 Activities

Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent activities. Cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- As directed by EPA, a Bird Wailer deterrent system was placed on the berm between the two new evaporation ponds (Fluid Management System [FMS] B and C). Three wind dancers and three bird deterrent flags have also been deployed around these two new ponds. Twelve new bird mitigation flag blocks were constructed around the FMS Evaporation Ponds. Wind dancers, bird deterrent flags and Bird Gard towers remained deployed around the Pumpback Well System (PWS) Evaporation Pond and the Lined Evaporation Pond (LEP). Propane cannons remained deployed around the FMS Evaporation Pond A and the Slot Pond. To reduce birds becoming habituated to wind dancers and flags remaining in one location, these bird mitigation devices were re-located as needed, based on observations by Site O&M personnel.
- Modifications to the electric lines and power connections around the LEP were completed to allow the 230-volt wind dancers to receive line power.
- Water levels in the PWS Evaporation Pond at the end of September were as follows: North Cell = 0.0 feet; Middle Cell = 0.0 feet; South Cell = 0.1 feet (accumulated rain water from November and December remained in the South Cell).
- Arimetco FMS pond levels: Phase 1 Pond = 4.5 feet; FMS Evaporation Pond A = 9.14 feet; FMS Evaporation Pond B = 1.57 feet; FMS Evaporation Pond C = 1.58 feet; VLT Pond = 13.52 feet; Slot Pond = 13.28 feet. No solution transfers occurred in December. Approximately 24,861 gallons of solution were pumped from the leak detectors, including 10,217 gallons from the VLT Pond and 11,685 gallons from the Slot Pond. Approximately 1,328,239 gallons of solution have been pumped from the leak detectors since January 1, 2013. See attached monitoring data.

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December 2013 Activities - Continued

Site Security and O&M Activities - Continued

- A routine FMS inspection on December 12 indicated that the 12-inch diameter discharge pipeline from the Slot Pond had separated on top of the Slot Heap Leach Pad (HLP) due to contraction as a result of unseasonably cold weather. No fluid discharged from the pipe as it had been previously drained. Repairs were made by Munson Pump on December 17.
- A routine FMS inspection on December 20 indicated that pin holes had developed in the 4-inch diameter VLT Pond discharge line near the road crossing at the south end of the VLT Pond. Approximately 20 gallons of fluids seeped onto the road berm. The discharge line was drained into the VLT Pond on December 20, and the damaged section was replaced on December 23.
- The VLT Pond flow meter, which had become clogged, was cleaned and re-calibrated on December 26.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained on December 17-18.
- A pit lake water elevation of 4230.36 feet amsl was recorded on December 18 from the pressure transducer, an increase of approximately 0.32 feet since November 18, 2013. The pit lake elevation has risen 1.84 feet since December 18, 2012.
- Signed access agreements were received from owners of new wells DW-203, DW-204, and DW-205, which have been added to the domestic well sampling program and will initially be sampled during the 1Q 2014 sampling event.
- Delivery of bottled water to DW-202 was reactivated as the residence has been re-occupied.
- The Additional Monitor Well Installation Work Plan continued with drilling and zonal sampling (15 samples) at B/W-50 and -83. Signed access agreements were received for drilling at the B/W-77S and -78S locations.
- Initiated the preparation of a technical memorandum to request parameter reductions from the Site-wide groundwater monitoring program.
- Transmitted the Initial Bedrock Characterization Data Summary Report (DSR) to EPA on November 20.
- Continued the preparation of a draft work plan for Single-Step Chemical Extraction (Leach) Tests, which was requested by EPA in Comment #44 on the Revised Groundwater RI Work Plan.
- Continued preparation of the draft report summarizing initial groundwater flow modeling results.
- Prepared for and attended a groundwater technical meeting on December 10.
- Continued work on the DSR for the OU-3 sub-surface utility and dry well investigations.
- Continued the characterization of Process Areas soils - 13 borings were completed for a total of 275 feet of drilling at the following PA- locations: DD13A, DD8A, DD5A, P3A (angle), K19, K20, UT04A, UT04B, K4B, P15A (angle), EE6A, P16A (angle) and DD17 (angle). A total of 136 samples were collected (104 normal samples and 32 quality control samples). Desert Engineering continued site preparation work in support of the program. Tri-State surveyed completed boring locations.
- Routine database management activities in support of Site investigations and monitoring.

Planned January/February 2014 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Continue the development of a technical memorandum that incorporates the two new evaporation ponds into the calibrated water balance model for Arimetco heap leach pad drain-down projections under a range of operating scenarios.

Planned January/February 2014 Activities - Continued

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue evaluating the potential replacement of all propane cannons by Wetland Wailer devices.
- Continue the Bottled Water Program.
- Transmit the 3Q 2013 Domestic Well Monitoring Report (DWMR) and the 3Q 2013 Groundwater Monitoring Report (GMR).
- Continue to compile 4Q groundwater and domestic well monitoring data.
- Transmit the revised Site-Wide Groundwater (OU-1) RI Work Plan and responses to comments.
- Continue field work associated with the Additional Monitor Well Work Plan.
- Transmit a draft work plan for supplemental characterization activities for the Evaporation Ponds and the northern portion of the Calcine Ditch.
- Transmit the DSR for the Phase II geophysical and soil investigations associated with sub-surface utilities in the Process Areas.
- Continue field work associated with the Process Areas Step-Out Drilling Program including the prioritization of select boreholes that may be required to be extended beyond the depths presented in the Final OU-3 RI Work Plan.
- Review data quality objectives for the Wabuska Drain (OU-7) RI Work Plan when received.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the December 2013 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Harry Ball, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill – via electronic mail
Virgil Arellano, Lyon County Commissioner – via electronic mail
Rob Loveberg, Lyon County Planning Department – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Chairwoman Howard, YPT – via electronic mail
John Mosely, YPT – via electronic mail
Deborah Dunn, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairwoman McFalls, WRPT – via electronic mail
Tad Williams, WRPT – via electronic mail
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